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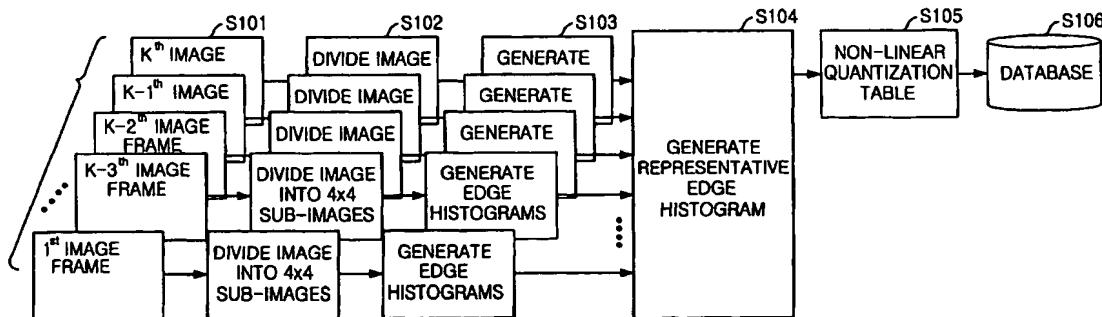
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(54) Title: NON-LINEAR QUANTIZATION AND SIMILARITY MATCHING METHODS FOR RETRIEVING VIDEO SEQUENCE HAVING A SET OF IMAGE FRAMES

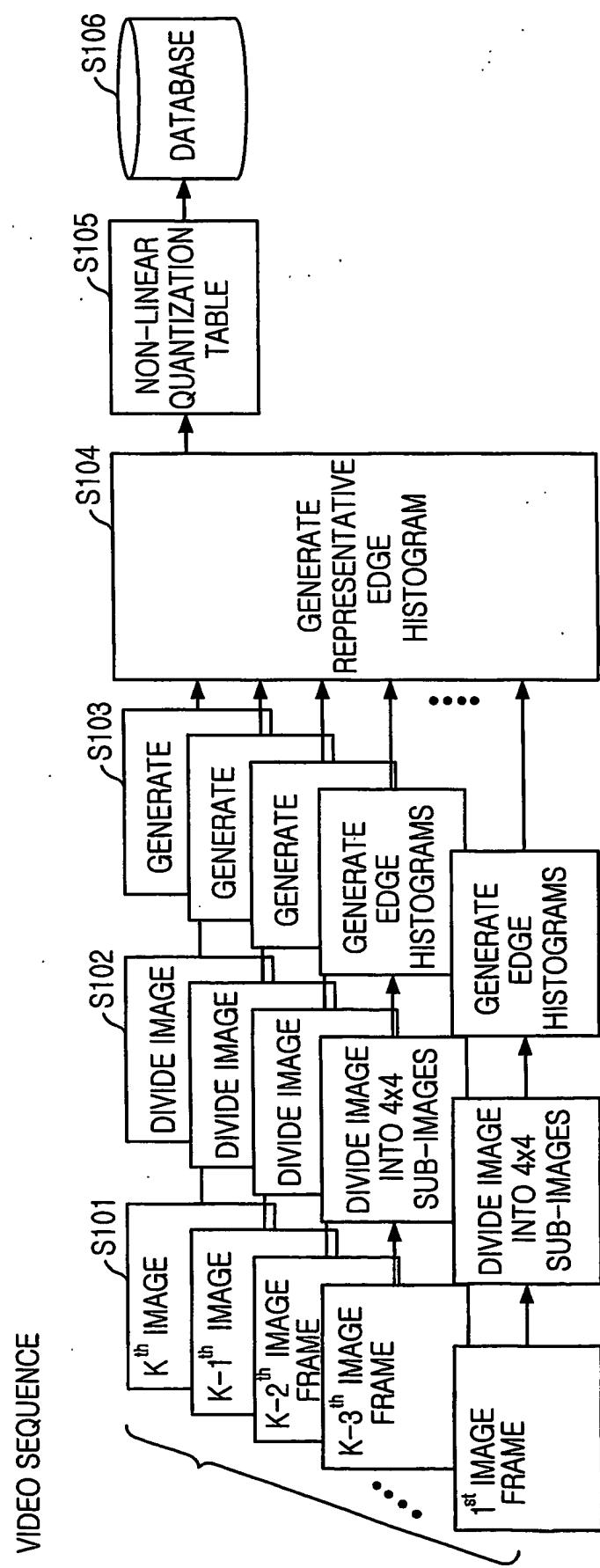
## VIDEO SEQUENCE

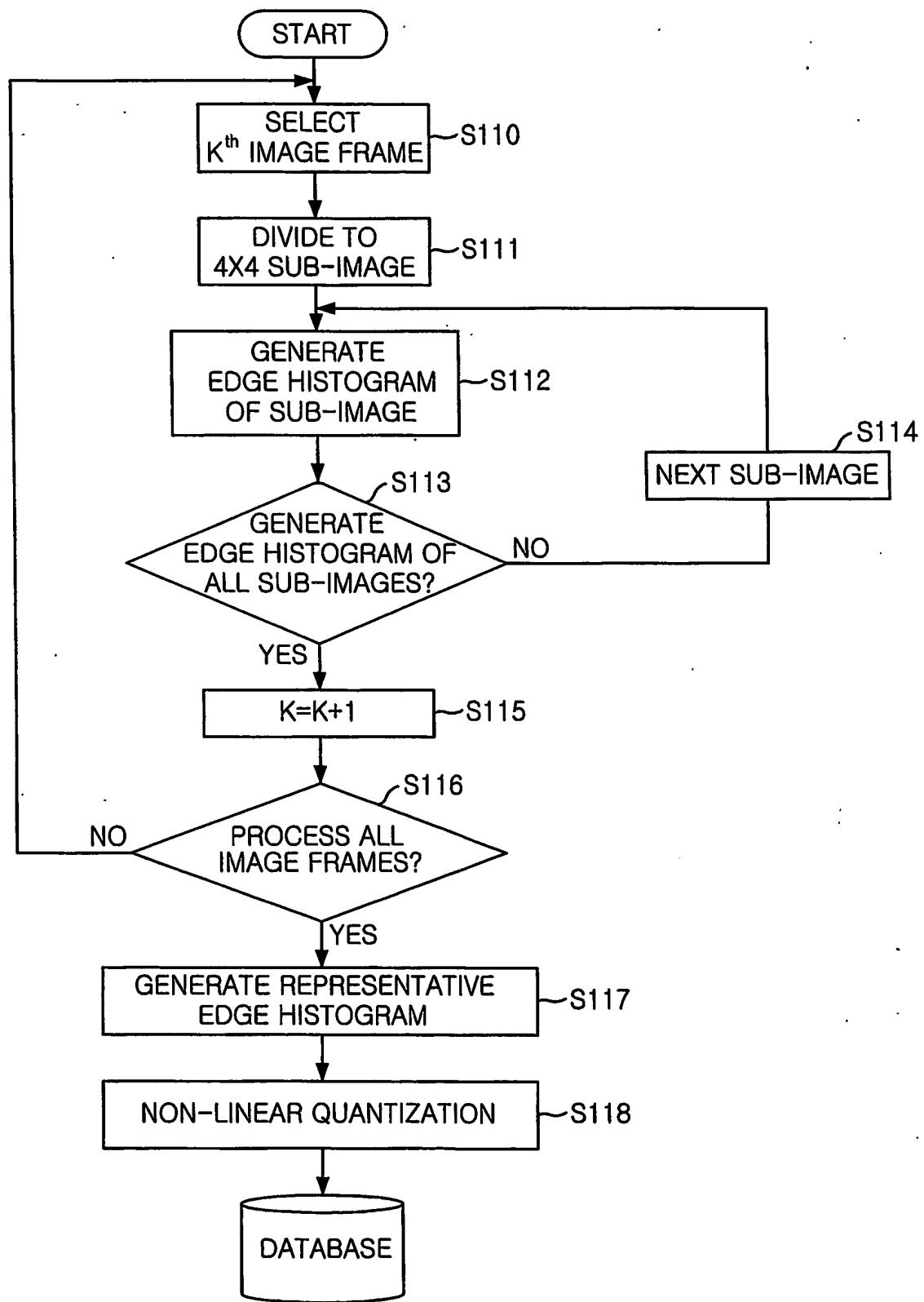


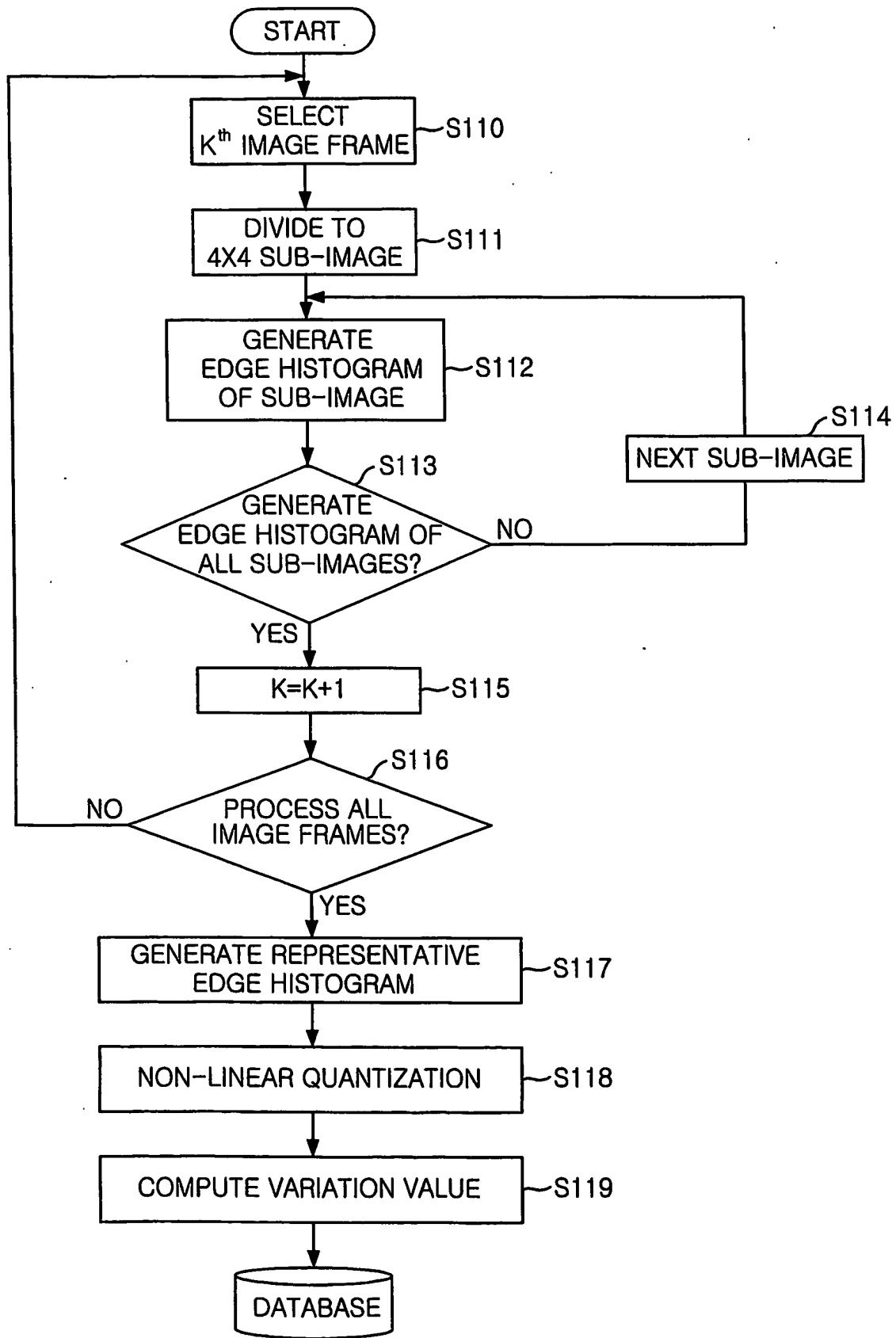
**(57) Abstract:** A method for constructing a database having digital video data information representing a plurality of video sequence is disclosed. The method includes the steps of: a) partitioning each image frame of each video sequence into L number of sub images; b) generating L number of edge histograms for each image frame; c) normalizing the edge histogram bins to thereby generate M number of normalized edge histogram bins; d) calculating M representative edge histogram bins in order to generate L number of representative edge histograms based on the normalized edge histogram bins; and e) non-linearly quantizing the representative edge histogram bins to generate M number of quantization index values for the each representative edge histogram, to be stored in the database.

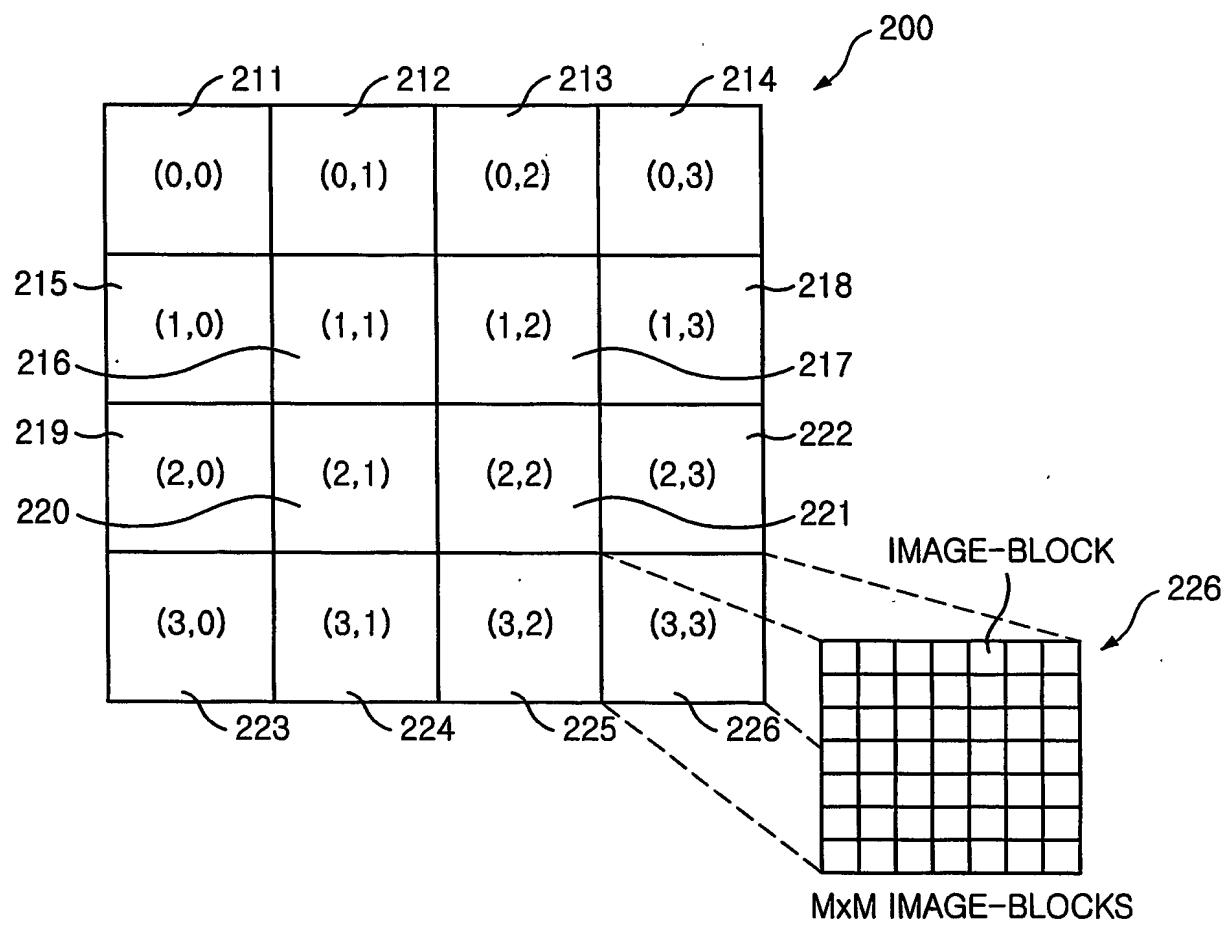
1/10

FIG. 1A



2/10  
FIG. 1B

3/10  
FIG. 1C

4/10  
FIG. 2

5/10  
FIG. 3A

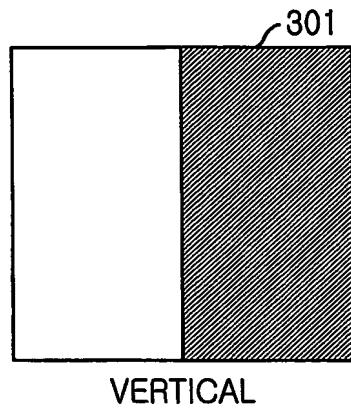


FIG. 3B

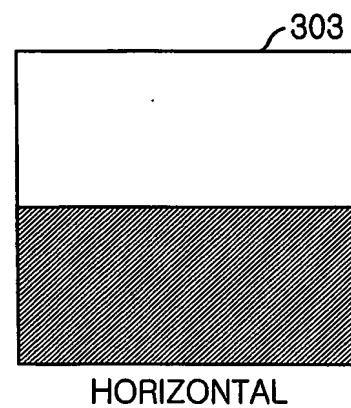
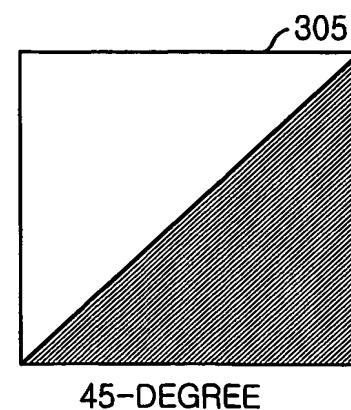


FIG. 3C



6/10  
FIG. 3D

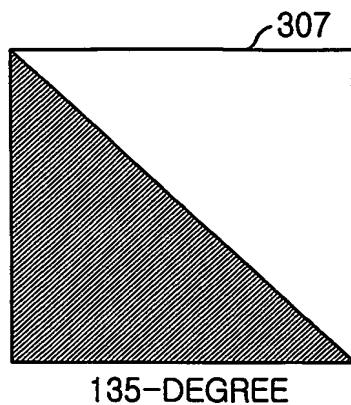
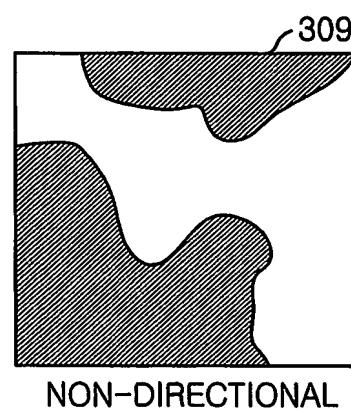


FIG. 3E



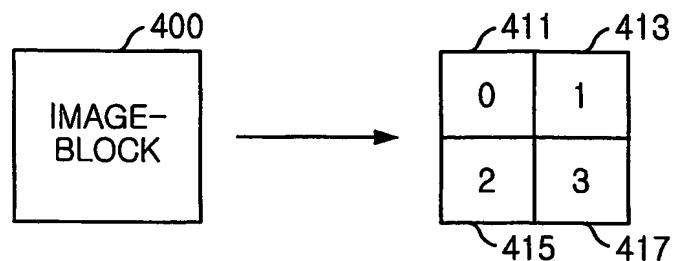
7/10  
FIG. 4

FIG. 5A

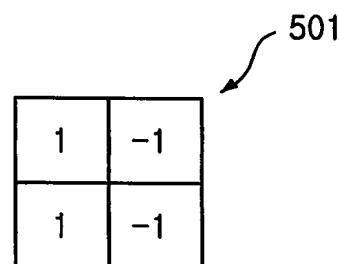
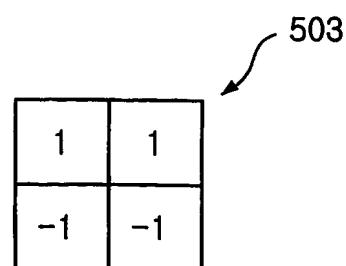
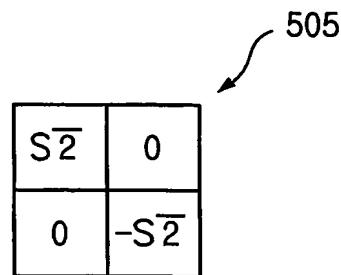


FIG. 5B



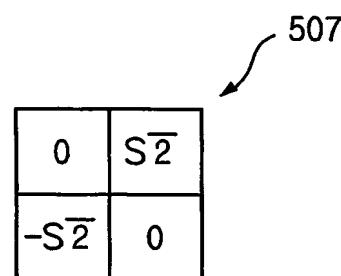
8/10

FIG. 5C



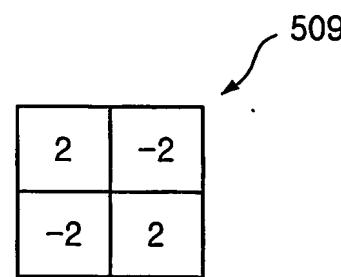
$S\bar{2}$	0
0	$-\bar{S2}$

FIG. 5D

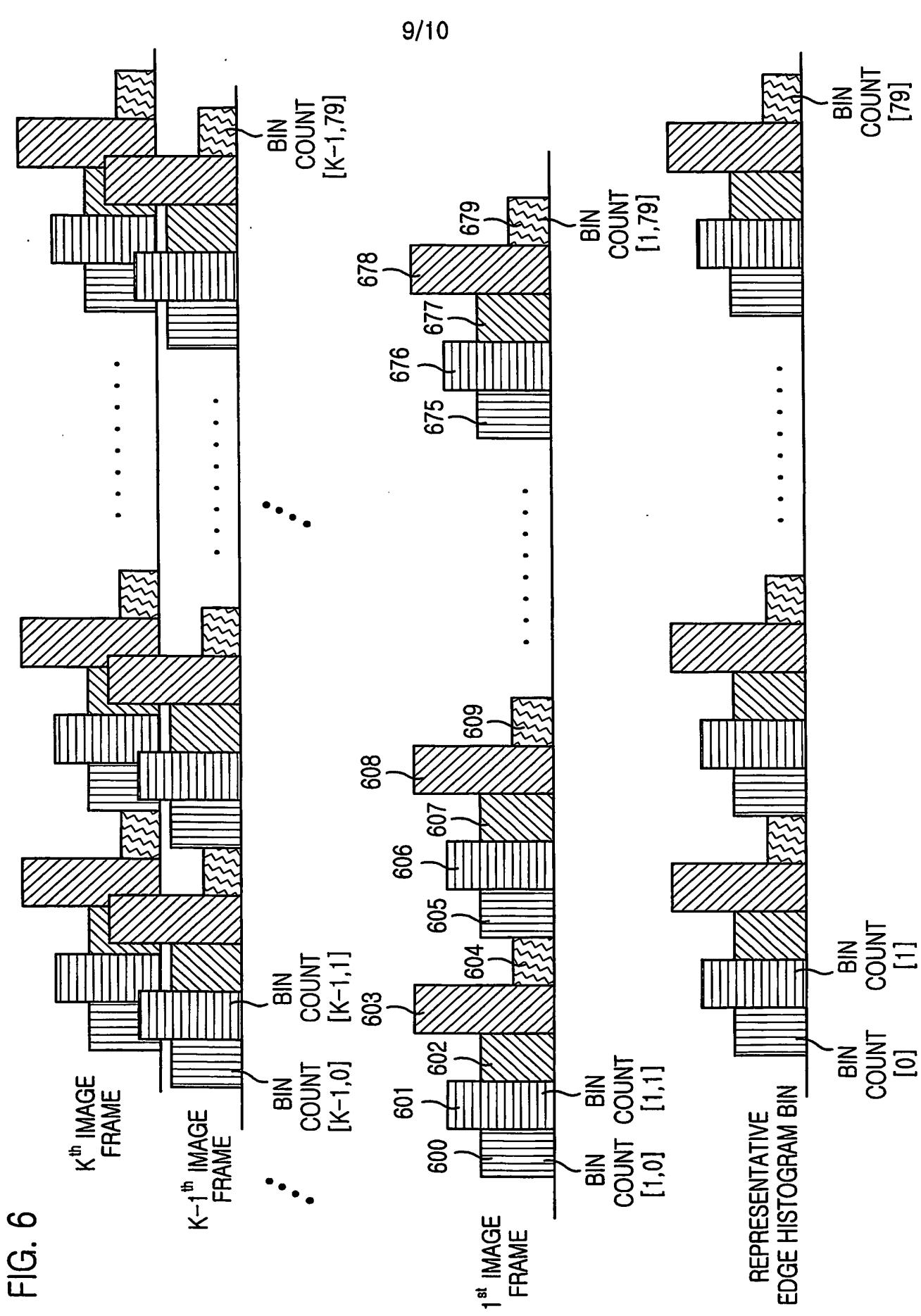


0	$S\bar{2}$
$-\bar{S2}$	0

FIG. 5E



2	-2
-2	2



10/10

FIG. 7

